

## REMARKS

- (1) Claims 1-7 are pending in this application.
- (2) Claim 1 is independent.
- (3) Claim 1 is amended hereby.

### **Rejection under 35 USC §112, second paragraph**

(1) In the Office Action of August 28, 2008, the Examiner has rejected claims 1-7 under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. The Examiner's specific discussion of the rejection is limited to claim 1; claims 2-7 depend therefrom.

The applicant has made amendment to claim 1 in order to address the concerns of the Examiner with respect to the rejection under 35 USC §112, second paragraph.

(2) Based on the amendment made herein above, the applicant respectfully submits that they have overcome the Examiner's rejection of claims 1-7 under 35 USC §112, second paragraph, as being indefinite.

### **Rejection under 35 USC §103(a)**

(1) In the present Office Action, the Examiner has rejected claims 1 to 3 and 7 under 35 USC §103(a) as being unpatentable over U.S. Patent No. 7,136,418 for Scalable And Perceptually Ranked Signal Coding And Decoding, issued November 14, 2006, to Atlas et al. (hereinafter referred to as "**Atlas**") in view of U.S. Patent No. 5,253,326 for Prioritization Method And Device For Speech Frames Coded By A Linear Predictive Order, issued October 12, 1993, to Yong (hereinafter referred to as "**Yong**").

In making the rejection, the Examiner has stated that:

Concerning independent claim 1, *Atlas et al.* discloses a method for multiple resolution scalable audio coding, comprising: ... 'assigning a priority to the individual groups, the priority of one group over another group becoming greater the greater the amplitudes of the groups values and/or the amplitude differences of the values of a group and/or the closer the group is to the current time' – matrices are quantized and priority ordered into a data packet, with the least perceptually relevant information at the end of the packet (Abstract); coefficients of the quantized matrices are prioritized based on the spectral frequency and modulation frequency (column 3, lines 40-44); implicitly, a modulation frequency represents a change, or modulation, of an amplitude of a frequency component from frame to frame ('the greater the amplitude differences'); ... (Office Action at p. 3 and 5)

Concerning independent claim 1, *Atlas et al.* discloses a method for multiple resolution scalable audio coding, comprising: ... 'sorting the field groups of said array with the aid of their priority value' – the prioritized coefficients are then encoded into the data packet in priority order ...ordering the coefficients by perceptual priority is equivalent to 'sorting the field groups' by 'their priority value'; ... (Office Action at p. 3 and 5)

The design and implementation of prioritization takes on different dimensions, different needs, different forms; and, its elements produce different results depending on the needs of the designer. Consider a NASCAR race. In assembling the components of the race vehicle, there is an optimal prioritization of steps and tasks that is employed in order to prepare the vehicle for a particular race. Completely independent of the assembly prioritization, is the prioritization for the line-up of vehicles for the race. In turn, the line-up prioritization is completely different than the prioritization of the race schedule. One cannot take the prioritization of vehicle assembly and hope to use it to establish a priority of race schedule. The applicant respectfully asserts that the Examiner has raised the inference that the prioritization of the applicant's claimed invention is the same as the prioritization of *Atlas*. It is not.

According to the present invention, the audio signal is represented in a two-dimensional array which is similar to image data. The first dimension is frequency (rather than a spatial dimension) and the second dimension is time (rather than a spatial dimension). However, if the image data were a video signal, there would also be a time dimension because video data changes over time. The fields of the array are grouped as described above, regardless of whether

or not the fields are adjacent in time or adjacent in frequency. The forming of field groups and a prioritization of the field groups, as taught by the applicant, are neither disclosed nor suggested by *Atlas* or *Yong* singularly, or in combination.

The Examiner, in the Office Action at page 6, has stated that:

... the only elements not clearly disclosed by *Atlas et al.* are ‘combining the fields used for the calculating of priority value into a field group’ and ‘forming a plurality of groups from each individual field and at least two fields of the array adjacent to this field’. *Atlas et al.* suggests that fields may be combined into field groups because MSD function coefficients (‘fields’) may be extracted from frequency groups approximately representing the critical band structure of the human auditory system. (Column 6, lines 35-39)

The applicant respectfully asserts that the Examiner has misapplied the teachings of *Atlas*, in that the description of the weighting factors, cited by the Examiner above, was sandwiched in *Atlas* by the teaching that: “The first perceptual model is used to compute accurate weighting factors from the MSD function coefficients. ... The quantized weighting factors are encoded into the data packet for later use in decoding.” (*Atlas* at col. 6, lines 28-29 and 49-50) The importance of this distinction is that not only does *Atlas* not teach ‘combining the fields used for the calculating of priority value into a field group’; but, there is no teaching nor suggestion that the groups of the applicant are, or should be, formed by including adjacent arrays. Further, the Examiner’s statement that coefficients are the same as fields belies the Examiner’s earlier statement that the coefficients are also prioritized by their nature. If that were so, then the prioritization of the group would be equal to the prioritization of an individual coefficient. In fact, the priority of the applicant’s “groups” is determined by one or more criteria applied to the group, not to its components individually.

With respect to *Yong*, the Examiner has stated (Office Action at p. 7) that: “A priority is assigned to each selected speech frame that protects against loss of perceptually important and/or hard to reconstruct speech frames based on a comparison of priorities assigned to selected immediately previous speech frames. (Column 3, lines 43-47)” Here, too, the Examiner is misapplying the teachings of *Yong* by making the inference that prioritizing components is the same as prioritizing the group. This misapplication continues with the Examiner’s further

statement that: “Yong provides for ‘combining the fields ... into a field group’ and ‘forming a plurality of groups from each individual field and at least two fields ... adjacent to this field’ ... (Column 2, lines 35-39)”. The applicant respectfully submits that **Yong**, at column 2, lines 33-39, clearly teaches only that:

A device and method include prioritization assignment of speech frames coded by a linear predictive speech coder in a packet-switched communications network. The incorporates units for, and the method includes the steps for, substantially assigning a priority to each of selected speech frames of digitized speech samples generated by a linear predictive speech coder in a packet switched communications network.

There is no teaching nor suggestion in the Examiner’s selected citation that: “*Yong* provides for ‘combining the fields ... into a field group’ and ‘forming a plurality of groups from each individual field and at least two fields ... adjacent to this field’”.

Thus, based on the Remarks herein above, the applicant respectfully submits that there is no teaching nor suggestion that the elements of **Atlas** should be combined with the elements of **Yong**, or any other related prior art, to achieve what the applicant has achieved. And, indeed, if such combination were to be made, the result would not be the applicant’s claimed invention.

The applicant respectfully submits that they have traversed the rejection by the Examiner of claims 1 to 3 and 7 under 35 USC §103(a) for being unpatentable over **Atlas** in view of **Yong**.

(2) In the present Office Action, the Examiner has rejected claims 4-6 under 33 USC §103(a) as being unpatentable over **Atlas** in view of **Yong**, and, further in view of U.S. Patent No. 5,886,276 for a System And Method For MultiResolution Scalable Audio Signal Encoding, issued March 23, 1999, to Levine et al. (hereinafter referred to as “**Levine**”).

The applicant respectfully submits that as they have traversed the rejection of the Examiner with respect to independent base claim 1, that claims 4-6 which depend therefrom enjoy the benefits of the parent and are, likewise, allowable at least for the reasons articulated in the Remarks made in section (1) hereinabove.

(3) For the reasons indicated herein above, the applicant respectfully submits that they have traversed the rejection by the Examiner of claims 1 to 3 and 7 under 35 USC §103(a) for being unpatentable over *Atlas* in view of *Yong*; and, further, that they have traversed the rejection by the Examiner of claims 4-6 under 35 USC §103(a) for being unpatentable over *Atlas* in view of *Yong* and further in view of *Levine*.

### **Conclusion**

(1) Applicant respectfully submits that claims 1-7 are allowable for at least the reasons noted hereinabove. A Notice of Allowance is therefore respectfully requested hereby.

(2) The Commissioner is hereby authorized to charge any fees which may be necessary for the consideration of this communication, or any additional fees required during examination of this application, and to credit any overpayment to Deposit Account No. 10-0100 (Attorney Docket No. RIEBL.P-57-MG).

Respectfully submitted,

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Date



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